

ABSTRACT OF THE DISCLOSURE

BONE MORPHOGENETIC PROTEIN-2 IN THE TREATMENT AND DIAGNOSIS OF CANCER

The present invention pertains to the use of BMP-2, which is overexpressed in
5 most common cancers, as 1) a target for cancer treatment therapies and 2) a means to
diagnose cancer. The therapeutic component of this invention involves administering to a
patient a composition that inhibits bone morphogenetic-2 activity. Such inhibition may
be accomplished by ligands or antibodies that bind to BMP-2 or BMP-2 receptors. It
may also be achieved by preventing the processing of pro-BMP-2, or blocking
10 transcription or replication of BMP-2 DNA or translation of BMP-2 mRNA. The
diagnostic component of the invention involves measuring the BMP-2 level in biological
samples from both a patient and a non-cancerous subject and comparing those levels.
Elevated levels of BMP-2 in the patient compared to the subject indicate cancer.

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